



New High Resolution 190kV and 240kV Microfocus X-Ray Tubes

By introducing the new 190kV und 240kV microfocus x-ray tubes X-RAY WorX GmbH reacts on the increasing diversity of applications in high resolution X-ray inspection. Particularly when it comes to the selection of the appropriate maximum acceleration voltage for a certain application companies are no longer restricted to the 160kV and 225kV microfocus X-ray tubes.

Using the new series of 190kV microfocus x-ray tubes manufacturers and users of X-ray inspection systems gain significantly higher flexibility. Unnecessary excess power can be avoided that is frequently resulting in higher system costs. The spectrum of innovations covers the standard microfocus X-ray tube XWT-190-T, the high resolution microfocus tube XWT-190-TC as well as the

high power tube XWT-190-SE with directional target. The product line is completed by the special CT-tube XWT-190-CT, featuring a cooling of the complete tube head, and the rod anode tube XWT-190-RA. Moreover all proven options like High Energy Target, High Resolution Target, and external cooling module for the tube head are available for the new 190kV tubes.

The high voltage technology used for the new 190kV X-ray tubes was developed in cooperation with a renowned company and is officially specified to 190kV by the manufacturer. This allows worldwide support through established service networks to ensure the optimum availability of X-ray systems.

The new X-ray tubes with 240kV

acceleration voltage of the XWT-series extend the application of computed tomography systems and allow penetrating higher wall-thicknesses in two- and three-dimensional X-ray analysis.

In connection with the new external cooling of the tube head the 240kV X-ray tubes are the perfect choice for CT systems for dimensional measurement with highest accuracy. Components of the tube were carefully selected and tested. Furthermore the high voltage generator was certified by the original supplier for the higher acceleration voltage. Almost all types of microfocus X-ray tubes are now available with 240kV acceleration voltage. This includes X-ray tubes with reflection target as well as rod anode tubes for X-ray inspection in areas that are difficult to access.

Rod Anode Tube with internal Cooling for KSB, Producer of Pumps and Valves

The leading producer of pumps, valves and related systems, KSB AG, located in Pegnitz, Germany, has enforced its test facility by a modern microfocus rod anode tube with internal cooling.

One of the application areas is the inspection of valves for power plants and casted pump housings made from metallic materials. A special emphasis is put on the inspection of particular regions that are hard to access. The internal cooling of the new rod anode tube supersedes the need to fix cooling hoses at the top of the rod anode. This facilitates the

handling of the rod anode tube significantly. The efficient deduction of heat allows higher tube power at higher endurance, which can lead to lower exposure times. The new technique also allows the use of rod anode tubes in digital X-ray inspection systems with semi-automatic or automatic positioning of the tube.

This new generation of microfocus rod anode tubes overcomes many disadvantages of tubes with external cooling. Especially the significant improvement of availability and efficiency of the tubes resulting in reduction of produc-

tion times are very important for many of our customers.

The development and production of high resolution rod anode tubes for various application areas is one of the core competences of X-RAY WorX. The rod anode tubes of X-RAY WorX are used in important industries like power station construction and aerospace.



Newsletter 01/2011
Garbsen, 29.07.2011

Copyright:
X-RAY WorX GmbH

[Unsubscribe from
newsletter](#)

New Partners for Sales and Service in Great Britain, India, China and the Russian Federation

To offer optimal support to our customers in their key markets worldwide, X-RAY WorX extends its international network and activities by contracting cooperations with experienced partners for sales and service, who have a long experience in microfocus technology

In Great Britain X-RAY WorX is represented by the company **Euroteck Systems**. The company was established more than ten years ago in Tamworth, located north east from Birmingham, by Collin Samson and Gary Wehrle, who both have more than 20 years of experience in non-destructive testing and who are supported by an experienced team of technicians.

Thanks to long-standing personal relationship X-RAY WorX could win the company **Shield Alloys** in Mumbai as a partner for the Indian subcontinent. Shield Alloys has excelled as a competent and reliable partner for products of the former company Feinfocus for more than ten years and knows microfocus technology from scratch.

In the Russian Federation the cooperation between **Rentest** and X-RAY WorX now offers customers the complete range of products and services to guarantee the safe and stable operation of their X-ray inspection systems. Rentest is located in Nishniy Novgorod and supplies various equipment for non-destructive testing with a

focus on X-ray systems.

To serve the growing demand of the Chinese high tech industry for microfocus X-ray tubes **Dalian Lind Import & Export Corporation** and X-RAY WorX GmbH have decided to cooperate in the area of high resolution microfocus X-ray technology. Dalian Lind Import & Export Corporation has many years of experience in microfocus X-ray technology und cooperates with other European suppliers in the sectors of high voltage technology and digital X-ray detector technology. In November 2011 Dalian Lind Import & Export Corporation will introduce the products of X-RAY WorX GmbH on an international industrial fair in Shanghai.

Automatic Venting for Microfocus X-ray Tubes

Easy usability and maintainability of open X-ray tubes is an important focus of developments in microfocus-technology. The latest improvement is the automatic venting of open microfocus tubes, which significantly facilitates the maintenance procedure.

Until now the venting of open X-ray tubes had to be performed manually during maintenance before replacing spare parts. Inaccuracies during this procedure could lead to damages of the turbopump and to serious failure of the tube. X-RAY WorX has identified this potential source of defect

and eliminates it by introducing an electronically controlled venting valve. The tubes are vented in an optimal way by considering the rotation speed of the turbo pump. This innovation results in reduction of down time and increases the operating life of the turbo pump.

To facilitate the maintenance procedure and increase the operating life, from now on all microfocus X-ray tubes supplied by X-RAY WorX will be delivered with electronically controlled venting valve.

X-RAY WorX nominated for New Founders Award 2011

Among three innovative companies X-RAY WorX GmbH was awarded the Founders Award 2011 within the StartUp-Impuls competition for innovative ideas that led to the establishment of a new company. The competition was endowed with trophy money of 80.000 EUR in total. It was arranged by **hannoverimpuls**, a business development company promoting start-up, growth and relocation of business in the

area of Hanover, and the **Stadtsparkasse Hannover**, a regional financial institute.

Forty companies applied for the Founders Award 2011 like X-RAY WorX did. The award was connected with a price of 2500 EUR.

New Version of JIMA Resolution Chart



The JIMA resolution chart for testing high resolution micro- and submicrofocus X-ray tubes is available in a new version (RC-02B).

The structure of the line pairs on the chip remained unchanged, whereas the structure of the aluminum housing was optimized to simplify the positioning of the test chart. The new version will be delivered by X-RAY WorX from now on.

Experience Hanover!



Experience the colorful world of fireworks of leading international pyrotechnicians. Visit the 21st international fireworks competition in the „Royal Garden“ of Hanover (Herrenhausen).

- 10. September 2011 Team Austria: Pyrovision
- 24. September 2011 Team Mexico: Pirotecnia Reyes

<http://www.hannover.de/>